Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Dementia: percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period.

Source(s)

American Medical Association-convened Physician Consortium for Performance ImprovementÂ® (PCPIÂ®). Dementia performance measurement sets. Chicago (IL): American Medical Association (AMA); 2015 Aug. 37 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period.

Rationale

Dementia is often characterized by the gradual onset and continuing cognitive decline in one or more domains including memory, executive function, language, judgment, and spatial abilities (American Psychiatric Association [APA], 2007). Cognitive deterioration represents a major source of morbidity and mortality and poses a significant burden on affected individuals and their caregivers (Daviglus et al., 2010). Although cognitive deterioration follows a different course depending on the type of dementia, significant rates of decline have been reported. For example, one study found that the annual rate of decline for Alzheimer's disease patients was more than four times that of older adults with no cognitive

impairment (Wilson et al., 2010). Nevertheless, measurable cognitive abilities remain throughout the course of dementia (APA, 2007). Initial and ongoing assessments of cognition are fundamental to the proper management of patients with dementia. These assessments serve as the basis for identifying treatment goals, developing a treatment plan, monitoring the effects of treatment, and modifying treatment as appropriate.

Supporting Guidelines

Ongoing assessment includes periodic monitoring of the development and evolution of cognitive and noncognitive psychiatric symptoms and their response to intervention. Both cognitive and noncognitive neuropsychiatric and behavioral symptoms of dementia tend to evolve over time, so regular monitoring allows detection of new symptoms and adaptation of treatment strategies to current needs... Cognitive symptoms that almost always require assessment include impairments in memory, executive function, language, judgment, and spatial abilities. It is often helpful to track cognitive status with a structured simple examination (APA, 2007).

Conduct and document an assessment and monitor changes in cognitive status using a reliable and valid instrument. Cognitive status should be reassessed periodically to identify sudden changes, as well as to monitor the potential beneficial or harmful effects of environmental changes, specific medications, or other interventions. Proper assessment requires the use of a standardized, objective instrument that is relatively easy to use, reliable (with less variability between different assessors), and valid (results that would be similar to gold standard evaluations) (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008).

Evidence for Rationale

American Medical Association-convened Physician Consortium for Performance ImprovementÂ® (PCPIÂ®). Dementia performance measurement sets. Chicago (IL): American Medical Association (AMA); 2015 Aug. 37 p.

American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA); 2007 Oct. 85 p. [554 references]

California Workgroup on Guidelines for Alzheimer's Disease Management. 'Guidelines for Alzheimer's disease management. Los Angeles (CA): Alzheimer's Disease and Related Disorders Association, Inc., Los Angeles Chapter; 2008.

Daviglus ML, Bell CC, Berrettini W, Bowen PE, Connolly ES, Cox NJ, Dunbar-Jacob JM, Granieri EC, Hunt G, McGarry K, Patel D, Potosky AL, Sanders-Bush E, Silberberg D, Trevisan M. NIH state-of-the-science conference statement: preventing Alzheimer's disease and cognitive decline. NIH Consens State Sci Statements. 2010 Apr 28;27(4):1-30. PubMed

Wilson RS, Aggarwal NT, Barnes LL, Mendes de Leon CF, Hebert LE, Evans DA. Cognitive decline in incident Alzheimer disease in a community population. Neurology. 2010 Mar 23;74(12):951-5. PubMed

Primary Health Components

Dementia; cognitive status; assessment

Denominator Description

All patients, regardless of age, with a diagnosis of dementia (see the related "Denominator

Inclusions/Exclusions" field)

Numerator Description

Patients for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

A systematic review of the clinical research literature (e.g., Cochrane Review)

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Reasons for Prioritizing Improvement in Dementia

High Impact Topic Area

Dementia is a chronic condition that poses a major and growing threat to the public's health. Improving the effectiveness of care and optimizing patient outcomes will become increasingly important as the population of the United States ages.

- Dementia affects approximately 5% to 8% of individuals over age 65 years, 15% to 20% of individuals over age 75 years, and 25% to 50% of individuals over age 85 years (Alzheimer's Association, 2009).
- Currently, an estimated 5.3 million Americans of all ages have Alzheimer's disease – the most common form of dementia (Alzheimer's Association, 2010).
- More than 20 percent of women and approximately 17 percent of men reaching the age of 65 would ultimately develop dementia (estimated lifetime risk) (Alzheimer's Association, 2010).
- Alzheimer's disease was the sixth-leading cause of death across all ages in the United States in 2007 (Xu et al., 2007). It was the fifth-leading cause of death for those aged 65 and older in 2006 (Alzheimer's Association, 2010).
- People with Alzheimer's disease and other dementias have more than three times as many hospital stays as other older people (Alzheimer's Association, 2010).
- At any one time, about one-quarter of all hospital patients aged 65 and older are people with Alzheimer's and other dementias (Alzheimer's Association, 2009).
- In 2009, almost 11 million family members, friends and neighbors provided 12.5 billion hours of unpaid care for a person with Alzheimer's disease or other dementias. This number represents an average of 21.9 hours of care per caregiver per week, or 1,139 hours of care per caregiver per year (Alzheimer's Association, 2010).
- The total estimated worldwide costs of dementia are $604 billion in 2010, accounting for around 1% of the world's gross domestic product (Alzheimer's Disease International, 2010).
- In 2005, the direct costs to Medicare and Medicaid for care for people with Alzheimer's and other dementias and the estimated indirect costs to businesses for employees who were caregivers of people with Alzheimer's and other dementias amounted to more than $148 billion (Alzheimer's

Association, 2009).

Demonstrated Opportunity for Improvement

According to a study analyzing the quality of medical care provided to vulnerable community-dwelling older patients, quality of care for geriatric conditions (e.g., dementia, urinary incontinence) was found to be poorer than care for general medical conditions (e.g., diabetes, heart failure). On average, patients with dementia received the recommended quality of care only about 35 percent of the time (Wenger et al., 2003).

Chodosh and colleagues found that current practice patterns indicate a significant opportunity for improvement in the quality of dementia care with a majority (11 of 18) of guideline-recommended dementia care processes having less than 40% adherence (Chodosh, Mittman, & Connor, 2007).

Another study identified considerable variability across sites in the routine implementation of recommended practices for the assessment, management and treatment of patients with dementia (Rosen et al., 2002).

Disparities

A recent systematic review and meta-analysis of the use of dementia treatment, care, and research identified significant racial and ethnic disparities in western countries, particularly the United States. Overall, the authors found "consistent evidence, mostly from the United States, that [minority ethnic] people accessed diagnostic services later in their illness, and once they received a diagnosis, were less likely to access antidementia medication, research trials, and 24-hour care" (Cooper et al., 2010).

Evidence for Additional Information Supporting Need for the Measure

Alzheimer's Association. 2009 Alzheimer's disease facts and figures. [internet]. Chicago (IL): Alzheimer's Association; 2009 [accessed 2010 Feb 24]. [80 p].

Alzheimer's Association. 2010 Alzheimer's disease facts and figures. [internet]. Chicago (IL): Alzheimer's Association; 2010 [accessed 2010 Aug 19]. [74 p].

Alzheimer's Disease International. World Alzheimer report 2010: the global economic impact of dementia. [internet]. London (UK): Alzheimer's Disease International; 2010 Sep [accessed 2010 Sep 28]. [56 p].

American Medical Association-convened Physician Consortium for Performance ImprovementÂ® (PCPIÂ®). Dementia performance measurement sets. Chicago (IL): American Medical Association (AMA); 2015 Aug. 37 p.

Chodosh J, Mittman BS, Connor KI, Vassar SD, Lee ML, DeMonte RW, Ganiats TG, Heikoff LE, Rubenstein LZ, Della Penna RD, Vickrey BG. Caring for patients with dementia: how good is the quality of care? Results from three health systems. J Am Geriatr Soc. 2007 Aug;55(8):1260-8. PubMed

Cooper C, Tandy AR, Balamurali TB, Livingston G. A systematic review and meta-analysis of ethnic differences in use of dementia treatment, care, and research. Am J Geriatr Psychiatry. 2010 Mar;18(3):193-203. [52 references] PubMed

Rosen CS, Chow HC, Greenbaum MA, Finney JF, Moos RH, Sheikh JI, Yesavage JA. How well are clinicians following dementia practice guidelines?. Alzheimer Dis Assoc Disord. 2002 Jan-Mar;16(1):15-23. PubMed

Wenger NS, Solomon DH, Roth CP, MacLean CH, Saliba D, Kamberg CJ, Rubenstein LZ, Young RT, Sloss

EM, Louie R, Adams J, Chang JT, Venus PJ, Schnelle JF, Shekelle PG. The quality of medical care provided to vulnerable community-dwelling older patients. Ann Intern Med. 2003 Nov 4;139(9):740-7. PubMed

Xu J, Kochanek KD, Murphy SL, Tehada-Vera B. Deaths: final data for 2007. Natl Vital Stat Rep. 2010 May 20;58(19):1-135.

Extent of Measure Testing

This measure is being made available without any prior testing. The Physician Consortium for Performance Improvement (PCPI) recognizes the importance of testing all of its measures and encourages testing of this dementia measure for feasibility and reliability by organizations or individuals positioned to do so. The Measure Testing Protocol for PCPI measures was approved by the PCPI in 2007 and is available on the PCPI Web site (see Position Papers at www.physicianconsortium.org); interested parties are encouraged to review this document and to contact PCPI staff. The PCPI will welcome the opportunity to promote the initial testing of these measures and to ensure that any results available from testing are used to refine the measures before implementation.

Evidence for Extent of Measure Testing

American Medical Association-convened Physician Consortium for Performance ImprovementÂ® (PCPIÂ®). Dementia performance measurement sets. Chicago (IL): American Medical Association (AMA); 2015 Aug. 37 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Assisted Living Facilities

Home Care

Skilled Nursing Facilities/Nursing Homes

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

All ages

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
All patients, regardless of age, with a diagnosis of dementia

Eligible Population:
All patients, regardless of age

AND

Current Procedural Terminology (CPT) codes for encounter (refer to the original measure documentation for CPT codes)

AND

> Diagnosis for dementia (refer to the original measure documentation for International Classification of Diseases, Ninth Revision, Clinical Modification [ICD-9-CM] codes [reportable through 9/30/2015])
> Diagnosis for dementia (refer to the original measure documentation for International Classification of Diseases, Tenth Revision, Clinical Modification [ICD-10-CM] codes [reportable beginning 10/1/2015])

Exclusions
None

Exceptions

> Documentation of medical reason(s) for not assessing cognition (e.g., patient with very advanced stage dementia, other medical reason)
> Documentation of patient reason(s) for not assessing cognition

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
Patients for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period

Refer to the original measure documentation for specific Current Procedural Terminology (CPT) Category II

codes for assessment and review of cognition.

Note: Cognition can be assessed by the clinician during the patient's clinical history. Cognition can also be assessed by direct examination of the patient using one of a number of instruments, including several originally developed and validated for screening purposes. This can also include, where appropriate, administration to a knowledgeable informant. Examples include, but are not limited to:

Blessed Orientation-Memory-Concentration Test (BOMC)
Mini Cog
Montreal Cognitive Assessment (MoCA)
St. Louis University Mental Status Examination (SLUMS)
Mini-Mental State Examination (MMSE) [Note: The MMSE has not been well validated for non-Alzheimer's dementias.]
Short Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)
Ascertain Dementia 8 (AD8) Questionnaire
Minimum Data Set (MDS) Brief Interview for Mental Status (BIMS) [Note: Validated for use with nursing home patients only.]
Formal neuropsychological evaluation

Exclusions
Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Measure #2: cognitive assessment

Measure Collection Name

AMA/PCPI Dementia Performance Measurement Set

Submitter

American Medical Association - Medical Specialty Society

Developer

Physician Consortium for Performance ImprovementÂ® - Clinical Specialty Collaboration

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

Dementia Measure Development Work Group*

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*The composition and affiliations of the work group members are listed as originally convened in 2006 and are not up to date.

Financial Disclosures/Other Potential Conflicts of Interest

None of the members of the Dementia Work Group had any disqualifying material interests under the Physician Consortium for Performance Improvement (PCPI) Conflict of Interest Policy. See the original measure documentation for a summary of non-disqualifying interests disclosed on Work Group members' Material Interest Disclosure Statements.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Aug

Measure Maintenance

Annual

Date of Next Anticipated Revision

2017

Measure Status

This is the current release of the measure.

Measure Availability

Source available from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site .

For more information, contact AMA at 330 N. Wabash Avenue Suite 39300, Chicago, Ill. 60611; Phone: 312-800-621-8335; Fax: 312-464-5706; E-mail: consortium@ama-assn.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on March 11, 2016. This NQMC summary was verified by the measure developer on March 29, 2016.

Copyright Statement

Production

Source(s)

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